

U.S. Patent Application No. 10/087,987
Attorney Ref. No.: 082137-0280712

Amendment of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-33. (Canceled)

34. (Currently amended) A method of treating a ~~pre-malignant lesion or a~~ malignant cancer in a subject, wherein the ~~pre-malignant lesion or~~ malignant cancer is characterized by the presence of activated matriptase, the method comprising:

- (a) obtaining a biological sample from a subject;
- (b) exposing the biological sample to a detectable agent that recognizes and binds to activated matriptase;
- (c) detecting activated matriptase that is bound to the detectable agent in the biological sample; and
- (d) administering to the subject an ~~agent~~ antibody that blocks the activity of active matriptase.

35. (Currently amended) The method of claim 34, wherein the matriptase that characterizes the ~~pre-malignant lesion or~~ malignant cancer is produced by cells of an epithelial tissue.

36. (Currently amended) The method of claim 34, wherein the ~~pre-malignant lesion or~~ malignant cancer is present in a breast of the subject.

37. (Canceled)

38. (Currently amended) The method of claim 34, wherein the detectable agent is an a detectable antibody.

39. (Currently amended) The method of claim 38, wherein the detectable antibody binds specifically to activated matriptase but not to inactive matriptase.

40. (Currently amended) The method of claim 39, wherein the detectable antibody binds specifically to an activated two-chain form of matriptase, but not to inactive, single-chain matriptase.

41. (Currently amended) The method of claim 40, wherein the detectable antibody is ~~selected from~~ M69 and M123.

U.S. Patent Application No. 10/087,987
Attorney Ref. No.: 082137-0280712

42. (Currently amended) The method of claim 38, wherein the detectable antibody is labeled with a detectable label.

43. (Currently amended) The method of claim 42, wherein the detectable antibody is labeled with a radioisotope or a fluorescent label.

44. (Currently amended) The method of claim 43, wherein the detectable antibody is labeled with a radioisotope selected from the group consisting of ^{62}Cu , ^{99}Te , ^{131}I , ^{123}I , ^{111}In , ^{90}Y , ^{188}Re , and ^{186}Re .

45-47. (Canceled)

48. (Currently amended) The method of claim 34, wherein the biological sample is obtained by biopsy, nipple aspirate, or removal of body fluid that has come into contact with cells of ~~a pre-malignant lesion or~~ a malignant cancer of the subject.

49. (Currently amended) The method of claim 34, wherein the ~~agent~~ antibody that blocks the activity of active matriptase binds specifically to and directly blocks the activity of activated matriptase.

50. (Canceled)

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II. ELECTION WITHOUT TRAVERSE

In response to the restriction requirement dated September 15, 2005, the applicants elect, **without traverse**, the invention of Group 1, claims 34-36, 38-44, and 48-50, directed to a method of identifying cancer *in vitro* that comprises active matriptase, and upon detection thereof, treating the cancer with an antibody.